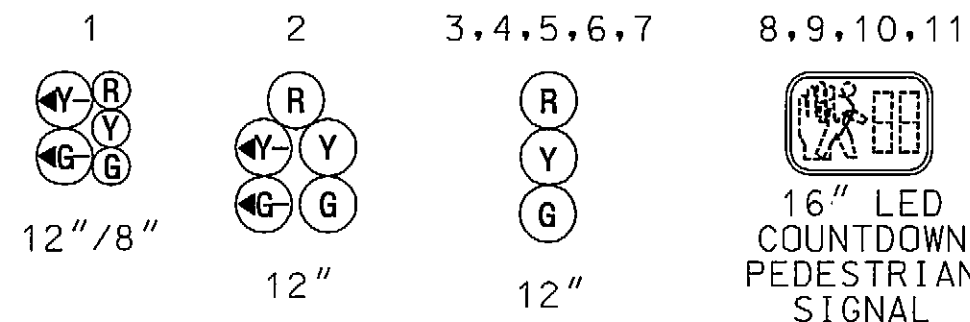
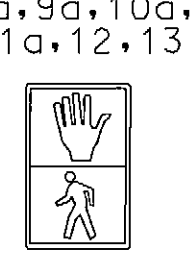


N  
MD 410 IS ASSUMED TO RUN  
IN AN EAST-WEST DIRECTION

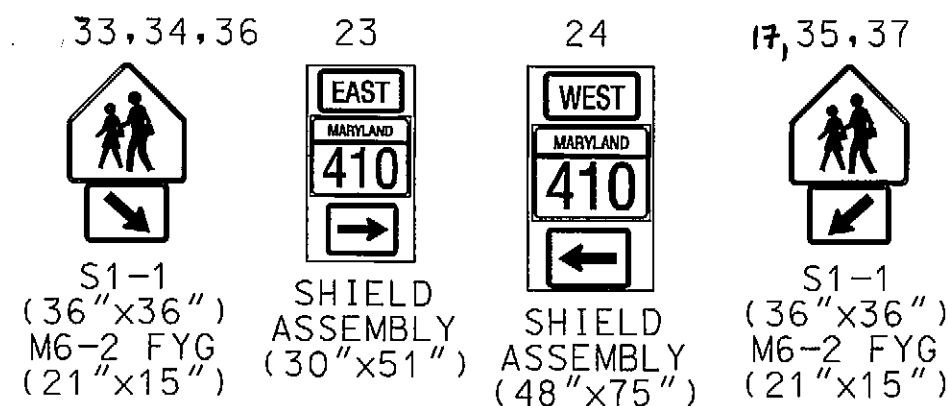
#### PROPOSED LED SIGNALS



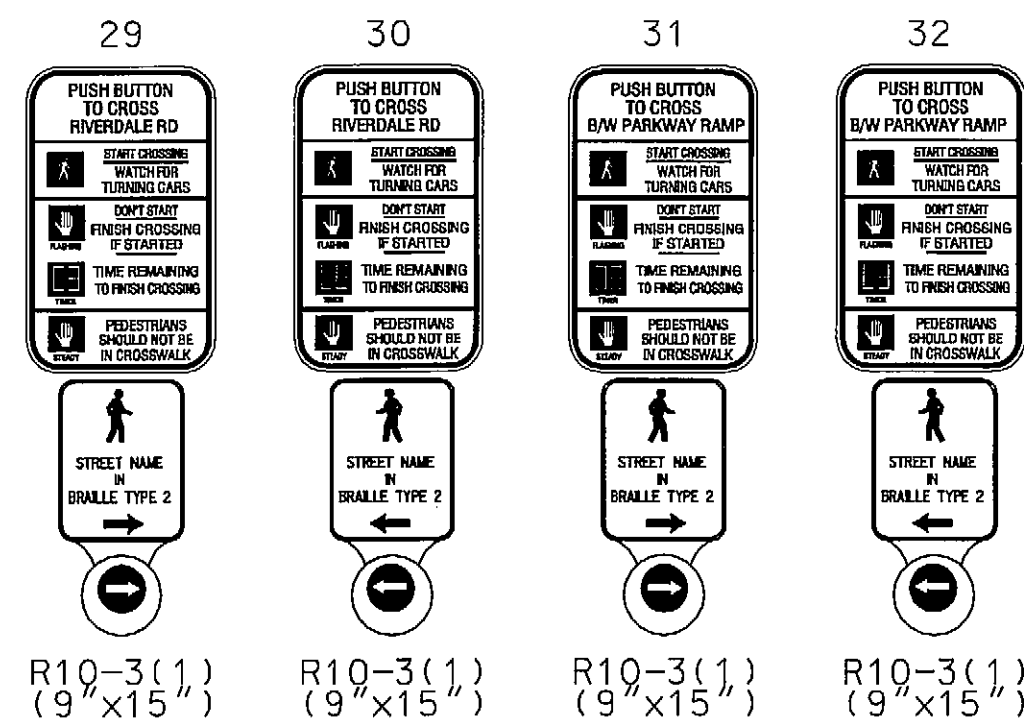
#### EXISTING SIGNALS TO BE REMOVED



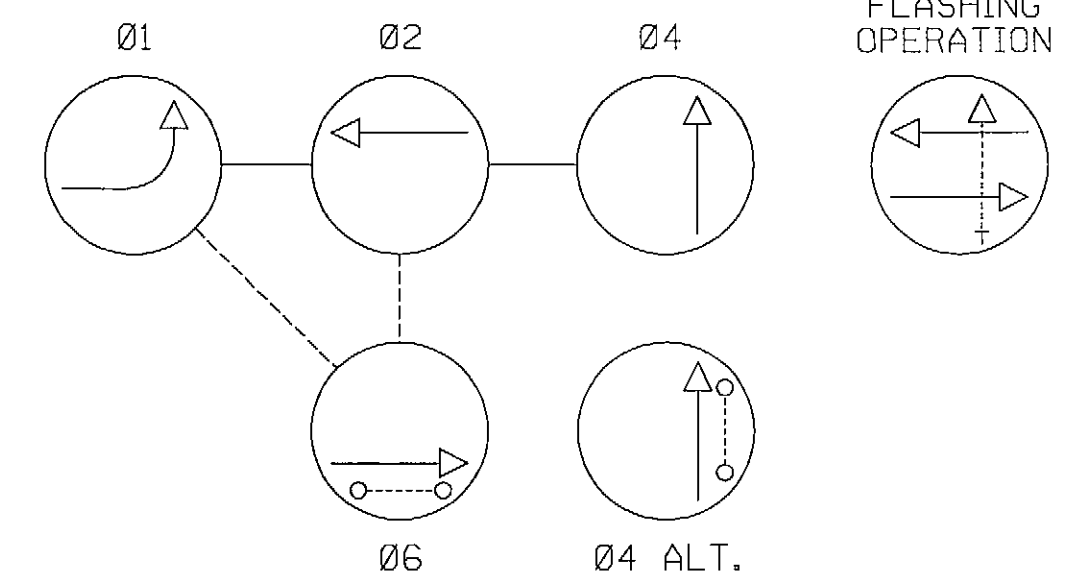
#### PROPOSED SIGNS



#### PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

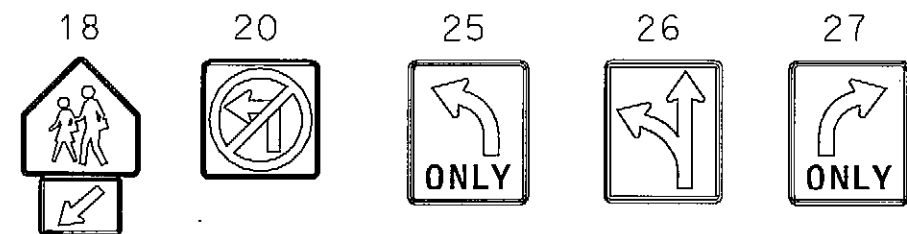


#### NEMA PHASING



NOTE:  
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

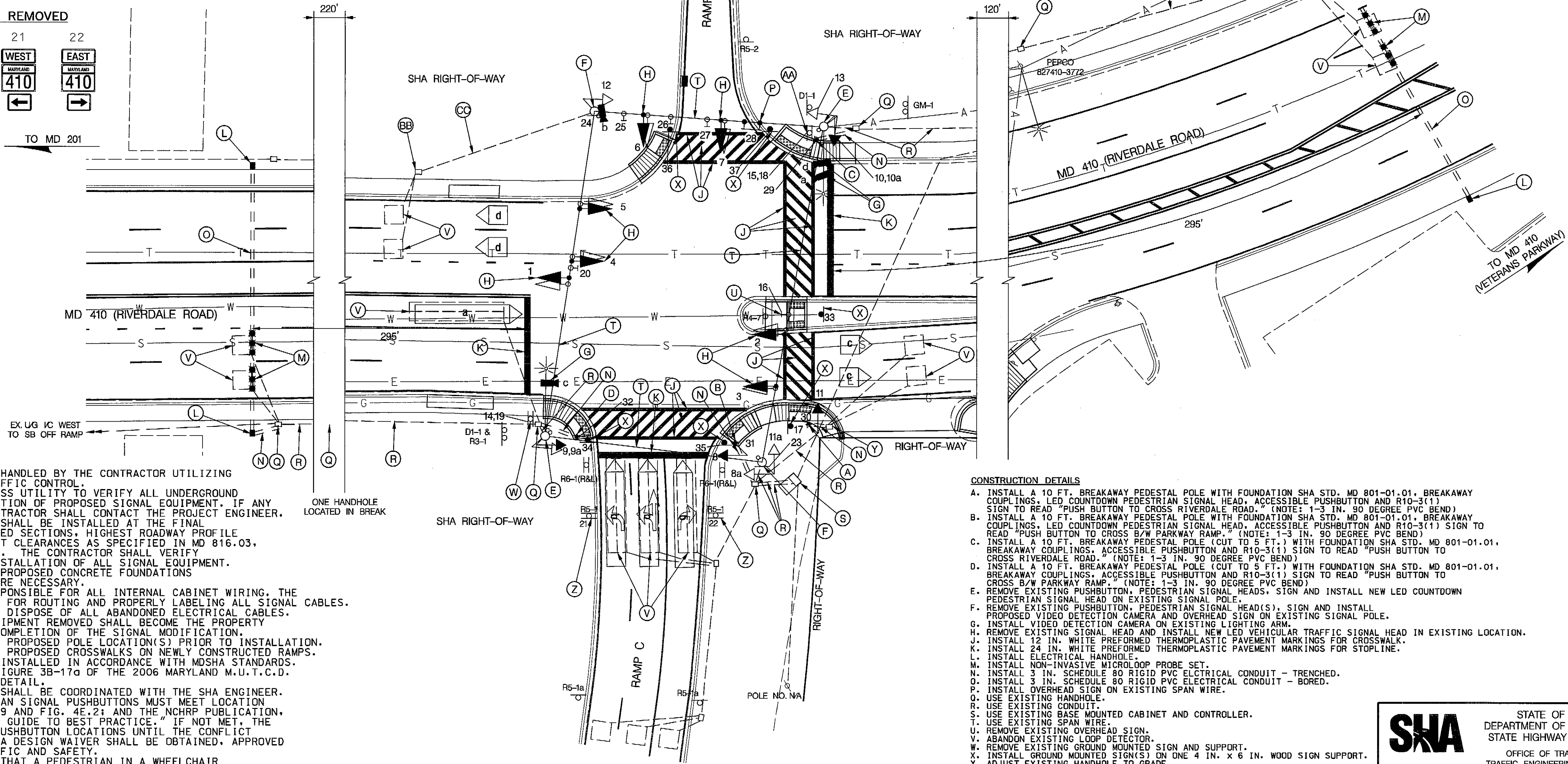
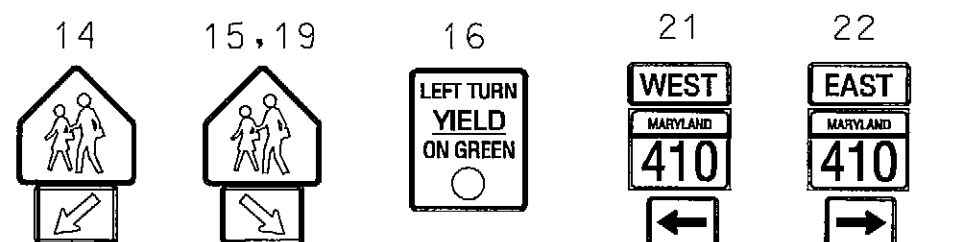
#### EXISTING SIGNS TO REMAIN



#### PROPOSED VIDEO DETECTION



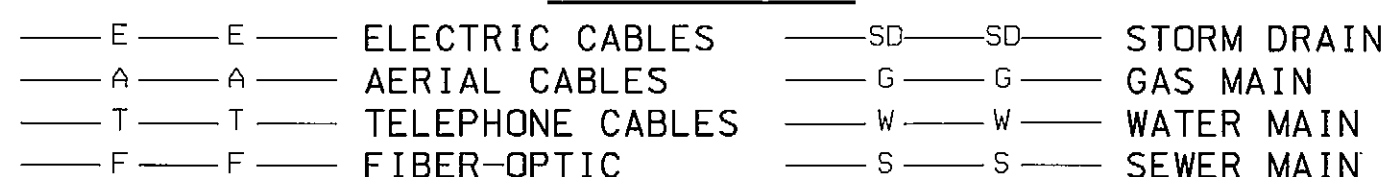
#### EXISTING SIGNS TO BE REMOVED



#### GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW CURB/SIDEWALK RAMP WHERE NECESSARY.
5. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING; THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
7. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION(S) PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY CONSTRUCTED RAMPS.
10. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
11. THE CONTRACTOR SHALL REFER TO FIGURE 3B-17G OF THE 2006 MARYLAND M.U.T.C.D. FOR CROSSWALK PAVEMENT MARKING DETAIL.
12. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
13. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
14. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
15. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
16. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
17. PUSHBUTTON ARROWS SHOULD BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
18. ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
19. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.

#### UTILITY LEGEND



#### CONSTRUCTION DETAILS

1. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801-01.01. BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS RIVERDALE ROAD." (NOTE: 1-3 IN. 90 DEGREE PVC BEND)
2. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801-01.01. BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS B/W PARKWAY RAMP." (NOTE: 1-3 IN. 90 DEGREE PVC BEND)
3. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH FOUNDATION SHA STD. MD 801-01.01. BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS RIVERDALE ROAD." (NOTE: 1-3 IN. 90 DEGREE PVC BEND)
4. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH FOUNDATION SHA STD. MD 801-01.01. BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON AND R10-3(1) SIGN TO READ "PUSH BUTTON TO CROSS B/W PARKWAY RAMP." (NOTE: 1-3 IN. 90 DEGREE PVC BEND)
5. REMOVE EXISTING PUSHBUTTON, PEDESTRIAN SIGNAL HEAD(S), SIGN AND INSTALL NEW LED COUNTDOWN PEDESTRIAN SIGNAL HEAD ON EXISTING SIGNAL POLE.
6. REMOVE EXISTING PUSHBUTTON, PEDESTRIAN SIGNAL HEAD(S), SIGN AND INSTALL PROPOSED VIDEO DETECTION CAMERA AND OVERHEAD SIGN ON EXISTING SIGNAL POLE.
7. INSTALL VIDEO DETECTION CAMERA ON EXISTING LIGHTING ARM.
8. REMOVE EXISTING SIGNAL HEAD AND INSTALL NEW LED VEHICULAR TRAFFIC SIGNAL HEAD IN EXISTING LOCATION.
9. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK.
10. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE.
11. INSTALL ELECTRICAL HANDHOLE.
12. INSTALL NON-INVASIVE MICROLOOP PROBE SET.
13. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
14. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED.
15. INSTALL OVERHEAD SIGN ON EXISTING SPAN WIRE.
16. USE EXISTING HANDHOLE.
17. USE EXISTING CONDUIT.
18. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
19. USE EXISTING SPAN WIRE.
20. REMOVE EXISTING OVERHEAD SIGN.
21. ABANDON EXISTING LOOP DETECTOR.
22. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORT.
23. INSTALL GROUND MOUNTED SIGN(S) ON ONE 4 IN. x 6 IN. WOOD SIGN SUPPORT.
24. ADJUST EXISTING HANDHOLE TO GRADE.
25. REMOVE EXISTING GROUND MOUNTED SIGN (#21, #22), EXISTING R5-1 SIGN AND WOOD SUPPORT TO REMAIN.
26. REMOVE EXISTING GROUND MOUNTED SIGN (#15), EXISTING S1-1 AND M6-2 SIGNS AND WOOD SUPPORT TO REMAIN.
27. REMOVE EXISTING ELECTRICAL HANDHOLE.
28. ABANDON EXISTING CONDUIT; CAP AT NEAREST HANDHOLE(S).

SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 410 (RIVERDALE ROAD) AT

MD 295 (BALTIMORE-WASHINGTON PARKWAY - EAST RAMP)

#### SIGNALIZATION PLAN SHEET

SCALE 1" = 20' ADVERTISED DATE 8/24/07 CONTRACT NO. BW 829-802-312

DESIGNED BY PAH OF GPI COUNTY PRINCE GEORGE'S  
DRAWN BY KBB OF GPI LOGMILE 16041005.46  
CHECKED BY TIMS NO. J-771  
F.A.P. NO. TOD NO.

TS NO. 3601-B DRAWING SG-05 OF 06 SHEET NO. OF

PLOTTED: Tuesday, April 21, 2009 AT 01:09 PM  
FILE: I:\PROJECTS\0312121\0312121\_0032\Drawings\TRA\4311\_MD 410 From MD 231 to 67th Place\p53-F005\_MD410at295EastRamp.dgn

STV Incorporated

engineers/architects/planners/construction managers  
7125 Ambassador Road, Baltimore, MD 21244-2722 (410) 944-9112